

METHODS OF SAMPLING AND TESTING
MT 419-04
METHOD OF SAMPLING AND SIEVE ANALYSIS OF GLASS BEADS
(Modified ASTM D-1214)

1 Scope:

- 1.1 This method covers the procedure for sampling and sieve analysis of glass beads and submitting samples to the Materials Bureau.

2 Referenced Documents:

- 2.1 **ASTM:**
D 1214 Test Method for Sieve Analysis of Glass Spheres

MT Manual:

MT 405 Wire Cloth Sieves for Testing Purposes

MT 417 Procedure for Reducing Field Samples to Testing Size

3 Apparatus:

- 3.1 *Sieves* – Standard 8 inch round brass sieves of the size specifies in the Standard Specifications and conforming to the provisions of MT-405.
- 3.2 *Balance* – The balance or scale shall have a capacity of at least 100 g. and a sensitivity of 0.05 g.
- 3.3 *Oven* – Capable of maintaining a constant temperature of 105 to 110 c.
- 3.4 *Sample Splitters* – Sample splitters of the type commonly used in the preparation of gravel samples and described in MT-417 .
- 3.5 *Sample Containers* - Clean new one quart non-corroding metal containers for shipment of the beads to the Materials Bureau.

4 Sampling Procedure:

- 4.1 A representative of the Department will randomly select samples to represent each lot, rack, or batch in the shipment.
- 4.2 A sample splitter shall be used to select the representative samples from the material to be tested.
- 3.3 Two separate samples of approximately one quart each shall represent each lot, rack, or batch, up to 10, 000 lbs. (4540 Kg) and one sample for each additional 10, 000 lbs or fraction thereof.

5 Testing Procedure:

- 5.1 The one quart containers of beads shall be further reduced in size to approximately 50 g. in weight by means of the mechanical splitters. This sample shall be dried to a constant weight in the oven at 105 to 110 c.
- 5.2 The dried sample shall then be sieved by the hand method over the specified screens and weight retained on each screen recorded to the nearest 0.05 g.
- 4.3 Calculate the percent passing each specified screen to the nearest 0.5 percent.